National Transportation Sufety Board
FACTUAL REPORT
AYIATION

NTSB ID: DCA06MA009

Aircraft Registration Number: N471WN

Occurrence Date: 12/08/2005

Most Critical Injury: Fatal

Occurrence Type: Accident

Investigated By: NTSB

Location/Time

Nearest City/Place
Chicago
State
IL

60638

Local Time
Time Zone
CST

Airport Proximity: On Airport/Airstrip

Distance From Landing Facility:

Aircraft Information Summary

Aircraft Manufacturer Model/Series Type of Aircraft
Boeing 737-700 Airplane

Revenue Sightseeing Flight: No

Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

*** Note: NTSB investigators traveled in support of this investigation and used data obtained from various sources to prepare this aircraft accident report. ***

The Safety Board's full report is available at http://www.ntsb.gov/publictn/publictn.htm. The Aircraft Accident Brief number is NTSB/AAR-07/06.

On December 8, 2005, about 1914 central standard time, Southwest Airlines (SWA) flight 1248, a Boeing 737-7H4, N471WN, ran off the departure end of runway 31 center (31C) after landing at Chicago Midway Airport (MDW), Chicago, Illinois. The airplane rolled through a blast fence, and airport perimeter fence, and onto an adjacent roadway, where it struck an automobile before coming to a stop. A child in the automobile was killed, one automobile occupant received serious injuries, and three other automobile occupants received minor injuries. Eighteen of the 103 airplane occupants (88 passengers, 3 flight attendants, and 2 pilots) received minor injuries, and the airplane was substantially damaged. The airplane was being operated under the provisions of 14 Code of Federal Regulations (CFR) Part 121 and had departed from Baltimore/Washington International Thurgood Marshall Airport (BWI), Baltimore, Maryland, about 1758 eastern standard time. Instrument meteorological conditions prevailed at the time of the accident flight, which operated on an instrument flight rules flight plan.

According to the CVR transcript, when the pilots contacted the MDW Air Traffic control Tower (ATCT) at 1909:53.7, controllers advised them to "continue for [runway] 31C the winds zero nine zero at nine, brakin' action reported good for the first half, poor for the second half." About 1912:28, the first officer received a landing clearance from the ATCT. Flight data recorder (FDR) data indicated that the airplane was aligned on the runway centerline as it touched down at an airspeed of about 124 knots. The speed brakes deployed and the brake pressure increased within about 1 second. Both pilots described the touchdown as "firm." The captain stated that he tried to deploy the thrust reversers immediately after touchdown but had difficulty moving the thrust reverser levers to the reverse thrust position. He further stated that he felt the antiskid system cycle after the airplane touched down but then felt it stop cycling and that the airplane seemed to accelerate. He said that he subsequently applied the wheel brakes manually but made no further effort to activate the thrust reversers. He told investigators that he believed that the use of the autobrake system distracted his attention from the thrust reversers after his initial attempt to deploy them.

The first officer said that, when he sensed a decrease in the airplane's deceleration during the landing sequence, he exclaimed, "brakes, brakes, brakes," and manually applied the brakes. He stated that he then looked at the throttle console and saw that the thrust reverse levers were still in the stowed position. The first officer moved the captain's hand away from the thrust reverser levers and, about 15 seconds after touchdown, initiated deployment of the thrust reversers to the maximum reverse setting. FDR evidence confirmed the systems functions described by the

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Narrative	(Continued)

pilots and indicated that full thrust reverser deployment occurred about 18 seconds after touchdown.

The first officer stated that, after the airplane came to a rest, he performed the emergency evacuation checklist while the captain checked on the passengers in the cabin. The passengers evacuated through the forward left and the right rear cabin doors.

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AVIATION	rence Type	: Accident									
Landing Facility/Approach Info	ormation										
Airport Name		Д	Airport ID: Airport Elevation		Run	unway Used Runwa		unway Length		Runw	ay Width
Midway Airport			MDW	620 Ft. MSL	_ 310	31C 6522				150	
Runway Surface Type: Concrete											
Runway Surface Condition: Snow											
Approach/Arrival Flown: ILS											
VFR Approach/Landing:											
Aircraft Information											
Aircraft Manufacturer Boeing			Model/ 737-7	/Series 700				Serial 3247	Number 71		
Airworthiness Certificate(s): Transp	oort										
Landing Gear Type: Retractable -	Tricycle										
Amateur Built Acft? No						154500) LBS	Numbe	er of Eng	r of Engines: 2	
Engine Type: Turbo Fan			-	anufacturer: ernational		Model/Se 56-7B2		Rated Power: 24000 LBS			
- Aircraft Inspection Information											
Type of Last Inspection		[[Date of Last Inspection Time			nce Last Insp	ection	Airfram	e Tot	al Time	
Continuous Airworthiness			11/2006				168 Ho	ours		5	273 Hours
- Emergency Locator Transmitter (El	LT) Information										
ELT Installed?/Type No		'	ELT Operat	ted? No	? No						
Owner/Operator Information											
Registered Aircraft Owner			Street A	Address 2702 Love Fig	ald Drive						
SOUTHWEST AIRLINES CO			City	2102 LOVO 1 10	State	\top	Zip Code				
			1	Dallas	TX	\perp	75235				
Operator of Aircraft			Street A	.ddress							
SOUTHWEST AIRLINES CO			City								Zip Code
Operator Does Business As:					Or	perator Desig	nator Co	ode: SV	/AA		
- Type of U.S. Certificate(s) Held:											
Air Carrier Operating Certificate(s): F	Flag Carrier/Dom	iestic									
Operating Certificate:	Operating Certificate: Operator Certificate:										
Regulation Flight Conducted Under:	Part 121: Air Ca	ırrier									
Type of Flight Operation Conducted:	Scheduled; Dor	nestic; F	Passenge	r Only							
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	AVIATI	Occurrence Type: Accident				1								
First Pilot	Information													
Name						City					State	е [Date of Birth	Age
														59
Sex: M	Seat Occupied:	upied: Left Occupational Pilot? Certificate Number:										er:		
Certificate(s): Airline Transport														
Airplane Ra	ating(s): Multi	-engine Lar	nd											
Rotorcraft/0														
Instrument	Rating(s): Airpl	ane												
Instructor F	Rating(s): None	Э												
Current Bie	nnial Flight Revie	ew? 07/2007	7											
Medical Ce	rt.: Class 1	Medica	al Cert. Status	s: With Wai	ivers/Limita	ations			Date	of La	st Me	dical Ex	am: 09/2005	
- Flight Tim	ne Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Ni	ight	ght Instrument Si		ment Simulated		Rotorcraft	Glider	Lighter Than Air
Total Time		8500	6000											
Pilot In Cor	nmand(PIC)		4000								\perp			
Instructor											\perp			
Instruction	Received					┷					\perp			
Last 90 Da	ys	243	243		243						\perp			
Last 30 Da		83	83		83						+		-	
Last 24 Ho		2	2		2							Τ_		
Seatbelt Us	sed? Yes	Shou	ılder Harness	Used? Yes			Toxico	logy Per	formed?	No		Sed	cond Pilot? Yo	es
	n/Itinerary													
	ht Plan Filed: IF	R												
Departure I	Point						State	ate Airport Ide			dentifier Departur		ure Time	Time Zone
Baltimore							MD	MD BWI		VI 1		1758		EST
Destination							State	Į.	irport Id	entifier	r			
Same as Accident/Incident Location								MDW						
Type of Cle	earance: IFR							•						
Type of Air	space:													
Weather	Information													
Source of	Wx Information:													
National Weather Service														
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AVIATION			(Occurrence Type: Accident									
Weather	Information												
WOF ID	Observation Time	Time Zone	W	OF Elevati	on	WOF Di	stance From	Accid	ent Site		Direction From Accident Site		
MDW	1915	CST		Ft.	MSL				1 NM		Deg. Mag.		
Sky/Lowes	ion			1	Ft. AG	L	Condition of Light: Night						
Lowest Ce		Ft.	AGL	Visibi	lity:		SM	Alti	meter:	30.06	"Hg		
Temperatu		-5 °C	Weat	ther Condit	tions at Acci	dent Si	te: Instrum	ent (Condition	S			
Wind Direc	ction: 110	Wind Sp	eed: 7	<u> </u>		Wind	d Gusts:						
Visibility (R	RVR): 300 Ft.	Visibility	(RVV)		SM								
	Vor Obscuration: rate - Showers - Snow												
Accident	Information												
Aircraft Dar	mage: Substantial		Д	Aircraft Fir	e: None				Aircraft Exp	losio	n None		
			•										
- Injury Su	mmary Matrix	Fatal	Serious	Mino	r	None	TOTAL						
First Pi	lot					1	1						
Second	d Pilot					1	1						
Studen	t Pilot												
Flight I	nstructor												
Check	Pilot												
Flight E	ngineer												
Cabin A	Attendants					3	3						
Other C	Crew												
Passen	igers				18	80	98						
- TOTAL A	ABOARD -				18	85	103						
Other G		1		1	3	30	5						
- GRAND) TOTAL -	1		1	21	85	108						
				'	- 1	20							

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Investigator-In-Charge (IIC)

Robert Benzon

Additional Persons Participating in This Accident/Incident Investigation:

Tony F James ASF-100, Federal Aviation Administration Washington, DC